

Town Of Kittery

**Sewer Department
18 Dennett RD
Kittery Me 03904**

INVITATION TO BID

Mongoose Model 184 Jet rodder

Sealed bids for furnishing the town of Kittery, Maine with one new Mongoose Model 184 Jet Rodder, as per specifications will be received by the town Manager, Municipal Building, 200 Rogers Road Ext., Kittery ME, 03904 until 2:30 PM, Wednesday, April 27, 2011, at which time they will be publicly opened and read. Proposals will be submitted in sealed envelopes, plainly marked: "Proposal for New Mongoose Model 184 Jet Rodder". No facsimiles. Specifications may be obtained at Kittery sewer Department or call George or Eric @ 1-207-439-4646. Bid package and Forms are available at www.kittery.org under Community News or by contacting The Town Manager.

Invitation to bid, Model 184 Mongoose 184 Jet Rodder 2011

Sealed bids for furnishing the town of Kittery, Maine with one new, Model 184, Mongoose Jet Rodder with implements, will be received by the Town Manager, Council Chambers, Municipal Building, 200 Rogers Rd, Maine 03904 until 2:30 PM April 27, 2011 at which time they will be publicly opened and read.

Proposals will be submitted in sealed envelopes plainly marked: "Proposal for Kittery Model 184 Mongoose Jet Rodder."

Delivery shall be F.O.B., Town of Kittery, Maine, Sewer Department on a work day between the hours of 8:00 am to 2:30 pm.

Delivery date may be a factor in determining the award. Please state anticipated delivery time.

The Model 184 Mongoose Jet Rodder shall conform to the pertinent Occupational Safety and Health Act requirements of the state of Maine.

The 2011 Model 184 Mongoose Jet Rodder shall be equipped with standard factory equipment with optional accessories and implements as specified. The dealer shall include with his quote a catalog (or literature) marked to indicate the standard factory equipment pertinent to his/her proposal.

The model 184 Mongoose offered in this proposal shall be absolutely new and the latest current year model as quoted.

The dealer will state in the proposal the make, and model number, etc of the Model 184 Jet Rodder he is offering. The make, model number, etc. Stated shall be for equipment that meets all the specifications and performs all the functions and is as represented. Not only by these specifications, but also by the descriptions in the descriptive literature with his bid, unless the literature is plainly marked otherwise.

The town of Kittery will pay the purchase within 15- 20 days following delivery of, and receipt of bills, for all items covered by the purchase order. In submitting a bid under these specifications, bidder should take into account all discounts and time allowed in accordance with the above payment policy. Therefore, all bidders should quote a net price exclusive of all Federal and State Excise taxes.

The town of Kittery reserves the right to waive any informalities in bids, to accept any bid, and to reject any or all bids, should it be deemed for the best interest of the town to do so. Also one day of training for employees, provided by the dealer.

TRAILER MOUNTED SEWER CLEANER

PLEASE CHECK "YES" OR "NO" FOR EACH ITEM BELOW. ITEMS CHECKED "YES" MUST MEET SPECIFICATIONS EXACTLY. FOR ALL ITEMS CHECKED "NO", PLEASE CLEARLY NOTE DIFFERENCE ON A SEPARATE SHEET OF PAPER. THE CITY RESERVES THE RIGHT TO REVIEW EXCEPTIONS AND JUDGE THE POSSIBILITY OF THEIR ACCEPTABILITY. FAILURE TO NOTE EXCEPTIONS WILL CAUSE REJECTION OF SAID BID.

Y
E N
S O

A. GENERAL :

It is the intent of these specifications to describe the minimum requirements for a new High Pressure Water Jet designed for the removal of sand, dirt, grease, detergents, other materials normally found in grease traps, storm drains, laterals and sanitary pipes. The machine described will be designed to deliver high performance capabilities and provide maximum safety and convenience. All parts not specifically mentioned which are required for complete unit shall conform in design, strength, quality of material, and workmanship to the highest standards of engineering practice.

B. DURAPROLENE WATER TANK SYSTEM:

- | | | | |
|---|---|---|--|
| — | — | 1 | |
| — | — | | Tank shall be welded/repairable construction of .500", U.V. stabilized Duraprolene™ with a seven (7) year warranty. |
| — | — | 2 | Total tank capacity shall be 300 gallons of water to provide a minimum run time of at least 17 minutes. The Duraprolene™ is to be ultraviolet stabilized to prevent material breakdown. The baffles of the tank will be constructed of .375" Duraprolene™. These baffles will reduce sloshing and distortion and will form no less than sixteen compartments. Tank bottom will be flat bottom type; pump intake will be located to allow sediment to settle at tank bottom rather than entering and damaging pump. Entire tank top shall be completely removable for safe access of personnel entry during maintenance. The tank shall have a 2" drain valve located at the rear of the trailer. |
| — | — | 3 | |
| — | — | | Tanks constructed of steel will not be acceptable due to the potential of water pump damage by rust and corrosion particles. |
| — | — | 4 | |
| — | — | | Tanks constructed of polyethylene will not be acceptable due to inadequate UV protection and lack of repair-ability. |

C. HYDRANT FILL SYSTEM

- 1
An overhead type tank filling assembly with a 1-1/2NPSH" x 25' fire hydrant fitting shall be located on the curbside. A 2" hydrant fitting to 3/4" garden hose fitting shall also be supplied.
- 2
A positive air gap anti-siphon system shall be incorporated to protect the potable water supply.
- 3
A storage bin for the hydrant hose shall also be provided.

D. WATER PUMP:

- 1
Pump shall be a heavy duty 5 cylinder type with positive displacement and with single acting quintaplex design and having a capacity of at least 18 GPM and 4000 PSI.
- 2
Pump shall have solid ceramic plungers and be capable of continuous operation at maximum designed pressure as well as running dry without damage. The run dry feature shall not require any type of clutch or low water warning system.
- 3
The pump shall be protected from over pressurizing by a pressure relief valve.
- 4
Blowout disc safety relief systems are not acceptable as they are prone to nuisance failures.
- 5
Pump should have an air gap between crankcase and plunger to prevent water from entering the crankcase in the event of valve failure.
- 6
Pump suction to be constructed of corrosion resistant piping with integral "T" strainer for protecting the pump suction.
- 7
Pump shall be capable of pumping fresh, salt and brackish water as well as specified chemicals without damage to the pump. In addition, the pump shall be rated for temperatures of at least 160 degrees.
- 8
Pump suction system must have a single air bleed valve for air removal.
- 9
Pump shall have an oil sight gauge and the pump crankcase shall not exceed four quarts.

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G. ROTATING SAFETY HOSE REEL:

- — 1 The Safety Reel will rotate a full 160 degrees providing easy access to
— — manholes. The 160 degree rotation will enable the operator to position the
— — machine out of the traffic pattern and provide protection for himself while
— — operating the machine. The rotating ability of the hose reel allows the operator
— — to manipulate the hose reel into various positions depending on location of
manhole. This allows for proper positioning of the hose reel without backing
up or repositioning the sewer machine. The hose reel is mounted on an
industrial swivel bearing that is sealed and eliminates contamination from dirt.
This industrial swivel bearing shall have minimum requirements of 7.88 I.D.,
14" O.D., and 2" thickness. The industrial swivel bearing shall have a minimum
load bearing weight of 5,000 Ft.-lbs. The bearing design shall have no wear
points except the greasable ball bearings and the races, which are constructed
of hardened steel to minimize wear. The bearing design minimizes any friction
for easy pivoting. The rotating hose reel will lock into position using a spring-
loaded safety pin at 2" intervals.
- — 3 The design of the reel shall include a minimum 1/4" deep "shoulder" machined
— — into the shaft that traps the reel between the bearing blocks on the either side
— — of the reel. This shoulder shall minimize side-to-side movement of the reel and
— — prevent the shaft from sliding out from the reel and creating a safety hazard.
In addition, the shoulders shall improve the ability of the system to handle any
thrust loadings on the reel assembly.
- — 4 The reel shall be an enclosed structure with no moving parts and no hoses
— — exposed to the outside of the reel. This will protect the hoses and minimize
— — the chance of injuries due to moving parts. Exposed hoses shall not be
— — acceptable.
- — 5 All hoses used to supply the hose reel or its hydraulic system shall be flexible
— — and shall be fully enclosed in a shroud and routed underneath the reel
— — structure below the reel drum. The hoses shall be fully secured and protected
— — against chafing and rubbing.
- — 6
— —
— — Rotating reels using plastic material and/or sliding contact or other wear
— — surfaces for swivel action will not be accepted.
- — 7
— — A single, right hand side control panel mounted on the rotating hose reel shall
— — provide access to all necessary operating controls. The control panel shall
— — rotate with the reel.
- — 8
— —
— — Units where the controls do not rotate with the reel are not acceptable.
- — 9
— —
— — The unit will be supplied with a Footage Meter mounted on the hose reel.

**I. SEWER
HOSE:**

- 1
- . The unit will be supplied with sewer cleaner hose capable of cleaning residential, commercial, or sanitary service lines, storm lines, culverts, drainage tiles and other open conducts.
- 2
- . The hose will be 1/2" ID by 500' with an operating pressure of 4,000 PSI and a minimum burst of pressure of 10,000 PSI. A Leader Hose will also be supplied as standard.

J. HYDRAULIC SYSTEM:

- 1
- . The hydraulic power system for driving the units systems shall consist of a pump directly driven by an auxiliary engine.
- 2
- . The hydraulic pump shall have a minimum operating capacity of at least 8 GPM and a tank with an inspection port and a filter that can be cleaned or replaced.
- 3
- . The hydraulic filter assembly shall be located within the hydraulic tank so as facilitate filter change and create less clean up. Spin on filters that allow leakage on the ground or associated parts of the equipment are unacceptable.
- 4
- . Shut-off valves will be installed on the suction lines to facilitate servicing of the hydraulic pump without the need of draining.

K. PIPING: G:

- 1 All piping systems subjected to high pressure shall use zinc chromate plated steel fittings with minimum burst pressure of four (4) times the system pressure. Hoses working pressure ratings shall exceed the maximum system pressure.
- 2
- . A strainer with a 80/20 mesh screen shall be installed in the suction line at a location accessible for cleaning.
- 3
- . All piping shall be installed to drain by gravity.
- 4
- . To control water flow from water pump, a single lever control shall regulate direction of water either to hose reel or back to tank utilizing a high-pressure valve assembly. This single lever control shall control a 3-way valve.
- 5
- . Water delivery to hose reel shall pass through a single 90-degree swivel rotary coupling.

L. ENGINE, GAUGES, AND CONTROLS:

- 1
The engine shall be diesel powered, water-cooled, four cylinder type rated at 50 hp with industrial type governor, air cleaner and muffler.
- a
Engine shall be protected from the elements with a shroud.
- 2
Engine shall have an integral protection system for low oil pressure and high water temperature protection.
- 3
The required engine accessories shall be furnished, including, but not limited to:
 - 12-volt ignition system with alternator and battery
 - Vernier throttle control
 - Starter with key lock starting switch
 - Replaceable cartridge type oil filter
 - Positive crankcase ventilation system
- 4
Power band belt, from engine sheave to pump sheave, is adjustable by movement of water pump.
- 5
The engine fuel tank will have sufficient capacity to facilitate 8 hours of continuous operation and will be aluminum construction.
- 6
Controls will include a Gauge Package consisting of oil indicator, voltage meter, hour meter and charging indicator.
- 7
Controls will include a 12 volt power plug-in.

M.

TRAILER:

- — 1 The trailer manufacturer must be a National Association of Trailer Manufacturers (NATM) member. The trailer must be certified by NATM to have been manufactured in accordance with NATM guidelines. NATM member products are regulated by two sections in the Department of Transportation (DOT); primarily the National Traffic and Safety Administration (NHTSA), and secondarily, the Federal Motor Carrier Safety Administration (FMCSA). Both of these regulatory bodies develop regulations concerning trailer safety.
- — 2 The frame shall utilize a modular design (Vari-Flex or equal) approach such that the unit will accept any alteration of hose reel assembly or pump and engine combination without ANY welding. All future product upgrades for hose reel and/or pump and engine combinations MUST bolt in to the existing unit for purposes of easy upgrade-ability.
- — 3 .
- — Unit will be equipped with a single torsion axle with 6000 lb. capacity.
- — 4 .
- — Unit will be equipped with two (2) radial tires.
- — 5 .
- — Trailer unit will be equipped with heavy-duty fenders, pintle type hitch, and electric brakes with breakaway switch.
- — 6 .
- — Unit will be equipped with complete ICC light group, reflectors, license plate holder and safety chains.

N. TOOL STORAGE:

- — 1 Unit will be equipped with one (1) heavy-duty 16-gauge steel top-opening toolbox with keyed lock system for storage of nozzles and other tools and is mounted curbside. The toolbox will measure 12" high, 32" wide, by 11" deep. Weather stripping will protect toolbox from intrusion of water or liquids.

O. PAINTING:

- — 1 .
- — Before painting, all metal shall be cleaned and etched with a phosphoric wash to insure permanent bond of primer and paint.
- — 2 .
- — All components of the unit whether purchased or manufactured shall be BOTH primed and painted prior to assembly in order to assure maximum resistance to corrosion. Painting after the assembly process is NOT acceptable.
- — 3 The unit shall have the trailer frame painted black and the hose reel and shall be painted gray.

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P.
ELECTRICAL
:

- — 1
— — .
— — All switches and/or engine controls shall be housed in a NEMA 4 enclosure to insure maximum protections against the elements.
— — 2
— — .
— — All electrical connections shall be made via water-tight NEMA 4 equivalent splices.
— — 3
— — . Tail lights shall be recessed in the trailer frame for maximum protection from damage as well as resistance to road vibration. Tail lights mounted to fenders or protruding from the face of the trailer frame are NOT acceptable.
— — 4 The main power supply shall have circuit protection and come direct from the unit's battery. All functions shall de-energize when the ignition switch is turned off. The ignition switch shall be used to energize various relays but not as a main power source.
— — 5
— — .
— — A dedicated ground shall be supplied to the control panel to assure a positive ground for all devices. Local grounding of the devices is not acceptable.
— —

Q.
ACCESSORIES:

- — 1
— — .
— — one (1) BB hose guide
— — 2
— — .
— — one (1) leader hose
— — 3
— — .
— — one (1) upstream pulley guide
— — 4
— — .
— — one (1) finned nozzle extension
— — 5
— — .
— — one (1) cleaning nozzle

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-	-	6
-	-	.
-	-	
-	-	one (1) Penetrator nozzle
-	-	7
-	-	.
-	-	
-	-	one (1) Warthog™ nozzle
-	-	8
-	-	.
-	-	
-	-	one (1) nozzle rack
-	-	9
-	-	.
-	-	
-	-	one (1) CD-ROM operators manual

R. HAND GUN CLEAN UP SYSTEM:

-	-	1	The clean-up systems will include a wash-down gun with 25 ft. of 1/2" ID hose
-	-	.	and will be equipped with a quick-disconnect fitting near the operator's station.
-	-		The gun have a machine grip with trigger shut-off and guard. The high
-	-		pressure hose shall have a rating of 2000 PSI working pressure and a 8000 PSI
-	-		burst pressure. The cleaning system shall have its own relief set at 500 PSI.
-	-		In addition, this circuit shall provide an orifice to facilitate the bypass of a
-	-		portion of the pump flow so as not to overheat the water by running all of the
-	-		pump flow across the relief valve.

U. LIGHTING ACCESSORIES:

-	-	1	
-	-	.	
-	-		
-	-		Strobe light.
-	-	2	
-	-	.	
-	-		
-	-		Flood light.

Town Of Kittery

**Sewer Department
18 Dennett RD
Kittery Me 03904**

**Town of Kittery – Bid Proposal
Agreement Acceptance
Model 184 Mongoose Jet Rodder with Implements**

Proposal submitted by:

Company Name _____ Tel. No. _____
Address _____

Name of authorized Signature _____ Title _____
Signature _____

Proposal:

Total net price of current year model Model 184 Mongoose Jet Rodder with optional
Accessories.

(1.) Model 184 Mongoose Jet Rodder \$ _____

Implements to be Purchased:

1. 300 Gallon single axel \$ _____

Total Delivery Price: \$ _____

* Unit to be delivered in approximately 30 days.

Proposal Accepted By:
Jonathan Carter, Town Manager

Exceptions: _____

Signature _____ Date _____